

“substantially the same time and manner” or a “meaningful opportunity to compete.”²⁴ Whether this legal standard is met can only be decided based on an analysis of specific facts and circumstances. Therefore, the Commission looks at each application on a case-by-case basis and considers the totality of the circumstances, including the origin and quality of the information in the record, to determine whether the nondiscrimination requirements of the Act are met.

A. Performance Data

7. **As** established in prior section 271 orders, the Commission has found that performance measurements provide valuable evidence regarding a BOC’s compliance or noncompliance with individual checklist items. The Commission expects that, in its *prima facie* case in the initial application, a BOC relying on performance data will:

- a) provide sufficient performance data to support its contention that the statutory requirements are satisfied;
- b) identify the facial disparities between the applicant’s performance for itself and its performance for competitors;
- c) explain why those facial disparities are anomalous, caused by forces beyond the applicant’s control (e.g., competing carrier-caused errors), or have no meaningful adverse impact on a competing carrier’s ability to obtain and serve customers; and
- d) provide the underlying data, analysis, and methodologies necessary to enable the Commission and commenters meaningfully to evaluate and contest the validity of the applicant’s explanations for performance disparities, including, for example, carrier specific carrier-to-carrier performance data.

8. The Commission has explained in prior orders that parity and benchmark standards established by state commissions do not represent absolute maximum or minimum levels of performance necessary to satisfy the competitive checklist. Rather, where these standards are developed through open proceedings with input from both the incumbent and competing carriers, these standards can represent informed and reliable attempts to objectively approximate whether competing carriers are being served by the incumbent in substantially the same time and manner, or in a way that provides them a meaningful opportunity to compete.” Thus, to the extent there is no statistically significant difference between a BOC’s provision of service to competing carriers and its own retail customers, the Commission generally need not **look** any further. Likewise, if a BOC’s provision of service *to* competing carriers satisfies the performance benchmark, the analysis is usually done. Otherwise, the Commission will examine the evidence further to make a determination whether the statutory nondiscrimination

²⁴ *Id*

²⁵ See *SWBT Kansas/Oklahoma* Order, 16 FCC Rcd at 6252, para. 31; *SWBT Texas* Order, 15 FCC Rcd at 18377, para. 55 & n.102.

requirements are met.” Thus, the Commission will examine the explanations that a BOC and others provide about whether these data accurately depict the quality of the BOC’s performance. The Commission also may examine how many months a variation in performance has existed and what the recent trend has been. The Commission may find that statistically significant differences exist, but conclude that such differences have little or no competitive significance in the marketplace. In such cases, the Commission may conclude that the differences are not meaningful in terms of statutory compliance. Ultimately, the determination of whether a BOC’s performance meets the statutory requirements necessarily is a contextual decision based on the totality of the circumstances and information before the Commission.

9. Where there are multiple performance measures associated with a particular checklist item, the Commission would consider the performance demonstrated by all the measurements as a whole. Accordingly, a disparity in performance for one measure, by itself, may not provide a basis for finding noncompliance with the checklist. The Commission may also find that the reported performance data are affected by factors beyond a BOC’s control, a finding that would make it less likely to hold the BOC wholly accountable for the disparity. This is not to say, however, that performance discrepancies on a single performance metric are unimportant. Indeed, under certain circumstances, disparity with respect to one performance measurement may support a finding of statutory noncompliance, particularly if the disparity is substantial or has endured for a long time, or if it is accompanied by other evidence of discriminatory conduct or evidence that competing carriers have been denied a meaningful opportunity to compete.

10. In sum, the Commission does not use performance measurements as a substitute for the 14-point competitive checklist. Rather, it uses performance measurements as valuable evidence with which to inform the judgment as to whether a BOC has complied with the checklist requirements. Although performance measurements add necessary objectivity and predictability to the review, they cannot wholly replace the Commission’s own judgment as to whether a BOC has complied with the competitive checklist.

B. Relevance of Previous Section 271 Approvals

11. In some section 271 applications, the volumes of the BOC’s commercial orders may be significantly lower than they were in prior proceedings. In certain instances, volumes may be so low as to render the performance data inconsistent and inconclusive.²⁷ Performance

²⁶ See *Bell Atlantic New York Order*, 15 FCC Rcd at 3970, para. 59.

²⁷ The Commission has never required, however, an applicant to demonstrate that it processes and provisions a substantial commercial volume of orders, or has achieved a specific ~~market~~ share in its service area, as a prerequisite for satisfying the competitive checklist. See *Ameritech Michigan Order*, 12 FCC Rcd at 20585, para. 77 (explaining that Congress had considered and rejected language that would have imposed a “market share” requirement in section 271(c)(1)(A)).

data based on low volumes of orders or other transactions are not as reliable an indicator of checklist compliance as performance based on larger numbers of observations. Indeed, where performance data are based on a low number of observations, small variations in performance may produce wide swings in the reported performance data. It is thus not possible to place the same evidentiary weight upon – and to draw the same types of conclusions from – performance data where volumes are low. as for data based on more robust activity.

12. In such cases, findings in prior, related section 271 proceedings may be a relevant factor in the Commission's analysis. Where a BOC provides evidence that a particular system reviewed and approved in a prior section 271 proceeding is also used in the proceeding at hand, the Commission's review of the same system in the current proceeding will be informed by the findings in the prior one. Indeed, to the extent that issues have already been briefed, reviewed and resolved in a prior section 271 proceeding, and absent new evidence or changed circumstances, an application for a related state should not be a forum for re-litigating and reconsidering those issues. Appropriately employed, such a practice can give us a fuller picture of the BOC's compliance with the section 271 requirements while avoiding, for all parties involved in the section 271 process, the delay and expense associated with redundant and unnecessary proceedings and submissions.

13. However, the statute requires the Commission to make a separate determination of checklist compliance for each state and, accordingly, we do not consider any finding from previous section 271 orders to be dispositive of checklist compliance in current proceedings. While the Commission's review may be informed by prior findings, the Commission will consider all relevant evidence in the record, including state-specific factors identified by commenting parties, the states, the Department of Justice. However, the Commission has always held that an applicant's performance towards competing carriers in an actual commercial environment is the best evidence of nondiscriminatory access to OSS and other network elements.²⁸ Thus, the BOC's actual performance in the applicant state may be relevant to the analysis and determinations with respect to the 14 checklist items. Evidence of satisfactory performance in another state cannot trump convincing evidence that an applicant fails to provide nondiscriminatory access to a network element in the applicant state.

14. Moreover, because the Commission's review of a section 271 application must be based on a snapshot of a BOC's recent performance at the time an application is filed, the Commission cannot simply rely on findings relating to an applicant's performance in **an** anchor state at the time it issued the determination for that state. The performance in that state could change due to a multitude of factors, such as increased order volumes or shifts in the mix of the types of services or UNEs requested by competing carriers. Thus, even when the applicant makes a convincing showing of the relevance of anchor state data, the Commission must examine **how** recent *performance* in that *state compares* to *performance at the time it approved*

²⁸ See *SWBT Texas Order*, 15 FCC Rcd at 18376, para. 53; *Bell Atlantic New York Order*, 15 FCC Rcd at 3974, para. 53.

that state's section 271 application, in order to determine if the systems and processes continue to perform at acceptable levels.

III. COMPLIANCE WITH ENTRY REQUIREMENTS – SECTIONS 271(c)(1)(A) & 271(c)(1)(B)

15. As noted above, in order for the Commission to approve a BOC's application to provide in-region, interLATA services, a BOC must first demonstrate that it satisfies the requirements of either section 271(c)(1)(A) (Track **A**) or 271(c)(1)(B) (Track **B**).²⁹ To qualify for Track **A**, a BOC must have interconnection agreements with one or more competing providers of "telephone exchange service . . . to residential and business subscribers." The Act states that "such telephone service may be offered . . . either exclusively over [the competitor's] own telephone exchange service facilities or predominantly over [the competitor's] own telephone exchange facilities in combination with the resale of the telecommunications services of another carrier." The Commission concluded in the *Ameritech Michigan Order* that section 271(c)(1)(A) is satisfied if one or more competing providers collectively serve residential and business subscribers."

16. As an alternative to Track A, Section 271(c)(1)(B) permits BOCs to obtain authority to provide in-region, interLATA services if, after 10 months **from** the date of enactment, no facilities-based provider, as described in subparagraph (A), has requested the access and interconnection arrangements described therein (referencing one or more binding agreements approved under Section 252), but the state has approved an SGAT that satisfies the competitive checklist of subsection (c)(2)(B). Under section 271(d)(3)(A)(ii), the Commission shall not approve such a request for in-region, interLATA service unless the BOC demonstrates that, "with respect to access and interconnection generally offered pursuant to [an SGAT], such statement offers **all** of the items included in the competitive checklist." Track B, however, is not available to a BOC if it has already received a request for access and interconnection from a prospective competing provider **of** telephone exchange service.³⁴

²⁹ See 47 U.S.C. § 271(d)(3)(A).

³⁰ *Id.*

³¹ *Id.*

³² See *Ameritech Michigan Order*, 12 FCC Rcd at 20589, para. 85; see also *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20633-35, paras. 46-48.

³³ 47 U.S.C. § 271(d)(3)(A)(ii)

³⁴ See *Ameritech Michigan Order*, 12 FCC Rcd at 20561-62, para. 34. Nevertheless, the above-mentioned foreclosure of Track B as an option is subject to limited exceptions. See 47 U.S.C. § 271(c)(1)(B); see also *Ameritech Michigan Order*, 12 FCC Rcd at 20563-64, paras. 37-38.

IV. COMPLIANCE WITH THE COMPETITIVE CHECKLIST – SECTION 271(c)(2)(B)

A. Checklist Item 1 – Interconnection

17. Section 271(c)(2)(B)(i) of the Act requires a section 271 applicant to provide “[i]nterconnection in accordance with the requirements of sections 251(c)(2) and 252(d)(1).”³⁵ Section 251(c)(2) imposes a duty on incumbent LECs “to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier’s network . . . for the transmission and routing of telephone exchange service and exchange access.”³⁶ In the *Local Competition First Report and Order*, the Commission concluded that interconnection referred “only to the physical linking of two networks for the mutual exchange of traffic.”³⁷ Section 251 contains three requirements for the provision of interconnection. First, an incumbent LEC must provide interconnection “at any technically feasible point within the carrier’s network.”³⁸ Second, an incumbent LEC must provide interconnection that is “at least equal in quality to that provided by the local exchange carrier to itself.”³⁹ Finally, the incumbent LEC must provide interconnection “on rates, terms, and conditions that *are* just, reasonable, and nondiscriminatory, in accordance with the terms of the agreement and the requirements of [section 251] and section 252.”⁴⁰

18. To implement the equal-in-quality requirement in section 251, the Commission’s rules require an incumbent LEC to design and operate its interconnection facilities to meet “the same technical criteria and service standards” that are used for the interoffice trunks within the

³⁵ 47 U.S.C. § 271(c)(2)(B)(i); see *Bell Atlantic New York Order*, 15 FCC Rcd at 3977-78, para. 63; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20640, para. 61; *Ameritech Michigan Order*, 12 FCC Rcd at 20662, para. 222.

³⁶ 47 U.S.C. § 251(c)(2)(A).

³⁷ *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order, 11 FCC Rcd 15499, 15590, para. 176 (1996) (*Local Competition First Report and Order*). Transport and termination of traffic are therefore excluded from the Commission’s definition of interconnection. See *id*.

³⁸ 47 U.S.C. § 251(c)(2)(B). In the *Local Competition First Report and Order*, the Commission identified a minimum set of technically feasible points of interconnection. See *Local Competition First Report and Order*, 11 FCC Rcd at 15607-09, paras. 204-11.

³⁹ 47 U.S.C. § 251(c)(2)(C).

⁴⁰ *Id.* § 251(c)(2)(D).

incumbent LEC's network." In the *Local Competition First Report and Order*, the Commission identified trunk group blockage and transmission standards as indicators of an incumbent LEC's technical criteria and service standards." In prior section 271 applications, the Commission concluded that disparities in trunk group blockage indicated a failure to provide interconnection to competing carriers equal-in-quality to the interconnection the BOC provided to its own retail operations."

19. In the *Local Competition First Report and Order*, the Commission concluded that the requirement to provide interconnection on terms and conditions that are "just, reasonable, and nondiscriminatory" means that an incumbent LEC must provide interconnection to a competitor in a manner no less efficient than the way in which the incumbent LEC provides the comparable function to its own retail operations.⁴⁴ The Commission's rules interpret this obligation to include, among other things, the incumbent LEC's installation time for interconnection service" and its provisioning of two-way trunking arrangements.⁴⁶ Similarly, repair time for troubles affecting interconnection trunks is useful for determining whether a BOC provides interconnection service under "terms and conditions that are no less favorable than the terms and conditions" the BOC provides to its own retail operations.⁴⁷

⁴¹ *Local Competition First Report and Order*, 11 FCC Rcd at 15613-15, paras. 221-225; see *Bell Atlantic New York Order*, 15 FCC Rcd at 3978, para. 64; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20641-42, paras. 63-64.

⁴² *Local Competition First Report and Order*, 11 FCC Rcd at 15614-15, paras. 224-25

⁴³ See *Bell Atlantic New York Order*, 15 FCC Rcd at 3978, para. 64; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20648-50, paras. 74-77; *Ameritech Michigan Order*, 12 FCC Rcd at 20671-74, paras. 240-45. The Commission has relied on trunk blockage data to evaluate a BOC's interconnection performance. Trunk group blockage indicates that end users *are* experiencing difficulty completing or receiving calls, which may have a direct impact on the customer's perception of a competitive LEC's service quality.

⁴⁴ *Local Competition First Report and Order*, 11 FCC Rcd at 15612, para. 218; see also *Bell Atlantic New York Order*, 15 FCC Rcd at 3978, para. 65; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20642, para. 65.

⁴⁵ 47 C.F.R. § 51.305(a)(5).

⁴⁶ The Commission's rules require an incumbent LEC to provide two-way trunking upon request, wherever two-way trunking arrangements are technically feasible. 47 C.F.R. § 51.305(f); see also *Bell Atlantic New York Order*, 15 FCC Rcd at 3978-79, **para. 65**; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20642, para. 65; *Local Competition First Report and Order*, 11 FCC Rcd 15612-13, paras. 219-20.

⁴⁷ 47 C.F.R. § 51.305(a)(5)

20. Competing carriers may choose any method of technically feasible interconnection at a particular point on the incumbent LEC's network.⁴⁸ Incumbent LEC provision of interconnection trunking is one common means of interconnection. Technically feasible methods also include, but are not limited to, physical and virtual collocation and meet point arrangements.⁴⁹ The provision of collocation is an essential prerequisite to demonstrating compliance with item 1 of the competitive checklist.⁵⁰ In the *Advanced Services First Report and Order*, the Commission revised its collocation rules to require incumbent LECs to include shared cage and cageless collocation arrangements as part of their physical collocation offerings.⁵¹ In response to a remand from the D.C. Circuit, the Commission adopted the *Collocation Remand Order*, establishing revised criteria for equipment for which incumbent LECs must permit collocation, requiring incumbent LECs to provide cross-connects between collocated carriers, and establishing principles for physical collocation space and configuration.⁵² To show compliance with its collocation obligations, a BOC must have processes and procedures in place to ensure that all applicable collocation arrangements are available on terms and conditions that are "just, reasonable, and nondiscriminatory" in accordance with section 251(c)(6) and the FCC's implementing rules.⁵³ Data showing the quality of procedures for processing applications for

⁴⁸ *Local Competition First Report and Order*, 11 FCC Rcd at 15779, paras. 549-50; see *Bell Atlantic New York Order*, 15 FCC Rcd at 3979, para. 66; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20640-41, para. 61.

⁴⁹ 47 C.F.R. § 51.321(b); *Local Competition First Report and Order*, 11 FCC Rcd at 15779-82, paras. 549-50; see also *Bell Atlantic New York Order*, 15 FCC Rcd at 3979, para. 66; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20640-41, para. 62.

⁵⁰ 47 U.S.C. § 251(c)(6) (requiring incumbent LECs to provide physical collocation); *Bell Atlantic New York Order*, 15 FCC Rcd at 3979, para. 66; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20640-41, paras. 61-62.

⁵¹ *Deployment of Wireline Services offering Advanced Telecommunications Capability*, First Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 4761, 4784-86, paras. 41-43 (1999), *aff'd in part and vacated and remanded in part sub nom. GTE Service Corp. v. FCC*, 205 F.3d 416 (D.C. Cir. 2000), *on recon.*, *Collocation Reconsideration Order*, 15 FCC Rcd 17806 (2000); *on remand*, *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Fourth Report and Order, 16 FCC Rcd 15435 (2001) (*Collocation Remand Order*), *per se* for recon. pending.

⁵² See *Collocation Remand Order*, 16 FCC Rcd at 15441-42, para. 12.

⁵³ *Bell Atlantic New York Order*, 15 FCC Rcd at 3979, para. 66; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20643, para. 66; *BellSouth Carolina Order*, 13 FCC Rcd at 649-51, para. 62.

collocation space, as well as the timeliness and efficiency of provisioning collocation space, help the Commission evaluate a BOC's compliance with its collocation obligations.⁵⁴

21. As stated above, checklist item 1 requires a BOC to provide "interconnection in accordance with the requirements of sections 251(c)(2) **and** 252(d)(1)."⁵⁵ Section 252(d)(1) requires state determinations regarding the rates, terms, and conditions of interconnection to be based on cost and to be nondiscriminatory, and allows the rates to include a reasonable profit." The Commission's pricing rules require, among other things, that in order to comply with its collocation obligations, an incumbent LEC provide collocation based on TELRIC.⁵⁷

22. To the extent pricing disputes arise, the Commission will not duplicate the work of the state commissions. **As** noted in the *SWBT Texas Order*, the Act authorizes the state commissions to resolve specific carrier-to-carrier disputes arising under the local competition provisions, and it authorizes the federal district courts to ensure that the results of the state arbitration process are consistent with federal law.⁵⁸ Although the Commission has an independent statutory obligation to ensure compliance with the checklist, section 271 does not compel us to preempt the orderly disposition of intercarrier disputes by the state commissions, particularly now that the Supreme Court has restored the Commission's pricing jurisdiction and has thereby directed the state commissions to follow FCC pricing rules in their disposition of those disputes."

23. Consistent with the Commission's precedent, the mere presence of interim rates will not generally threaten a section 271 application so long as: (1) an interim solution to a particular rate dispute is reasonable under the circumstances; (2) the state commission has demonstrated its commitment to the Commission's pricing rules; and (3) provision is made for refunds or true-ups once permanent rates are set.⁶⁰ In addition, the Commission has determined

⁵⁴ *Bell Atlantic New York Order*, 15 FCC Rcd at 3979, para. 66; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20640-41, paras. 61-62.

⁵⁵ 47 U.S.C. § 271(c)(2)(B)(i) (emphasis added)

⁵⁶ *Id.* § 252(d)(1).

⁵⁷ See 47 C.F.R. §§ 51.501-07, 51.509(g); *Local Competition First Report and Order*, 11 FCC Rcd at 15812-16, 15844-61, 15874-76, 15912, paras. 618-29, 674-712, 743-53, 826.

⁵⁸ See *SWBT Texas Order*, 15 FCC Rcd at 18394, para. 88; see also 47 U.S.C. §§ 252(c), (e)(6); *American Tel. & Tel. Co. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999) (*AT&T v. Iowa Utils. Bd.*).

⁵⁹ *SWBT Texas Order*, 15 FCC Rcd at 18394, para. 88; *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. at 377-86.

⁶⁰ *SWBT Texas Order*, 15 FCC Rcd at 18394, para. 88; see also *Bell Atlantic New York Order*, 15 FCC Rcd at 4091, para. 258 (explaining the Commission's case-by-case review of interim prices).

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that rates contained within an approved section 271 application, including those that are interim, are reasonable starting points for interim rates for the same carrier in an adjoining state.”

24. Although the Commission has been willing to grant a section 271 application with a limited number of interim rates where the above-mentioned three-part test is met, it is clearly preferable to analyze a section 271 application on the basis of rates derived from a permanent rate proceeding.⁶² At some point, states will have had sufficient time to complete these proceedings. The Commission will, therefore, become more reluctant to continue approving section 271 applications containing interim rates. It would not be sound policy for interim rates to become a substitute for completing these significant proceedings.

B. Checklist Item 2 – Unbundled Network Elements⁶³

1. Access to Operations Support Systems

25. Incumbent LECs use a variety of systems, databases, and personnel (collectively referred to as OSS) to provide service to their customers.⁶⁴ The Commission consistently has found that nondiscriminatory access to OSS is a prerequisite to the development of meaningful

⁶¹ *SWBT Kansas/Oklahoma Order*, 16 FCC Rcd at 6359-60, para. 239.

⁶² *See Bell Atlantic New York Order*, 15 FCC Rcd at 4091, para. 260.

⁶³ We note that the United States Court of Appeals for the District of Columbia Circuit recently opined in two relevant Commission decisions. *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd 3696 (1999) (*Local Competition Order*) and *Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order in CC Doc. No. 98-147 and Fourth Report and Order in CC Doc. No. 96-98, 14 FCC Rcd 20912 (1999) (*Line Sharing Order*). *USTA v. FCC*, 290 F.3d 415 (D.C. Cir. 2002), *petition for rehearing and suggestion for rehearing en banc denied Sept. 4, 2002*. The court’s decision addressed both our UNE rules and our line sharing rules. The Commission is currently reviewing its UNE rules, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, 16 FCC Rcd 22781 (2001) (*Triennial Review Notice*). Further, the court stated that “the *Line Sharing Order* must be vacated and remanded.” *USTA v. FCC*, 290 F.3d at 429. The court also stated that it “grant[ed] the petitions for review[] and remand[ed] the *Line Sharing Order* and the *Local Competition Order* to the Commission for further consideration in accordance with the principles outlined.” *Id.* at 430. On September 4, 2002, the D.C. Circuit denied petitions for rehearing filed by the Commission and others. See *Order*, Nos. 00-1012 and 00-1015 (D.C. Circuit, filed Sept. 4, 2002).

⁶⁴ *Id.* at 3989-90, para. 83; *BellSouth South Carolina Order*, 13 FCC Rcd at 585

local competition.⁶⁵ For example, new entrants must have access to the functions performed by the incumbent's OSS in order to formulate and place orders for network elements or resale services, to install service to their customers, to maintain and repair network facilities, and to bill customers.⁶⁶ The Commission has determined that without nondiscriminatory access to the BOC's OSS, a competing carrier "will be severely disadvantaged, if not precluded altogether, from fairly competing" in the local exchange market.⁶⁷

26. Section 271 requires the Commission to determine whether a BOC offers nondiscriminatory access to OSS functions. Section 271(c)(2)(B)(ii) requires a BOC to provide "nondiscriminatory access to network elements in accordance with the requirements of sections 251(c)(3) and 252(d)(1)."⁶⁸ The Commission has determined that access to OSS functions falls squarely within an incumbent LEC's duty under section 251(c)(3) to provide unbundled network elements (UNEs) under terms and conditions that are nondiscriminatory and just and reasonable, and its duty under section 251(c)(4) to offer resale services without imposing any limitations or conditions that are discriminatory or unreasonable.⁶⁹ The Commission must therefore examine a BOC's OSS performance to evaluate compliance with section 271(c)(2)(B)(ii) and (xiv).⁷⁰ In addition, the Commission has also concluded that the duty to provide nondiscriminatory access to OSS functions is embodied in other terms of the competitive checklist as well." Consistent with prior orders, the Commission examines a BOC's OSS performance directly under checklist items 2 and 14, as well as other checklist terms."

27. As part of its statutory obligation to provide nondiscriminatory access to OSS functions, a BOC must provide access that sufficiently supports each of the three modes of

⁶⁵ See *Bell Atlantic New York Order*, 15 FCC Rcd at 3990, para. 83; *BellSouth South Carolina Order*, 13 FCC Rcd at 547-48,585; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20653.

⁶⁶ See *Bell Atlantic New York Order*, 15 FCC Rcd at 3990, para. 83.

⁶⁷ *Id.*

⁶⁸ 47 U.S.C. § 271(c)(2)(B)(ii).

⁶⁹ *Bell Atlantic New York Order*, 15 FCC Rcd at 3990, para. 84.

⁷⁰ *Id.*

⁷¹ *Id.* As part of a BOC's demonstration that it is "providing" a checklist item (e.g., unbundled loops, unbundled local switching, resale services), it must demonstrate that it is providing nondiscriminatory access to the systems, information, and personnel that support that element or service. An examination of a BOC's OSS performance is therefore integral to the determination of whether a BOC is offering all of the items contained in the competitive checklist. *Id.*

⁷² *Id.* at 3990-91, para. 84.

competitive entry envisioned by the 1996 Act – competitor-owned facilities, UNEs, and resale.” For OSS functions that are analogous to those that a BOC provides to itself, its customers or its affiliates, the nondiscrimination standard requires the BOC to offer requesting carriers access that *is* equivalent in terms of quality, accuracy, and timeliness.⁷⁴ The BOC must provide access that permits competing carriers to perform these functions in “substantially the same time and manner” as the BOC.⁷⁵ The Commission has recognized in prior orders that there may be situations in which a BOC contends that, although equivalent access has not been achieved for an analogous function, the access that it provides is nonetheless nondiscriminatory within the meaning of the statute.⁷⁶

28. For OSS functions that have no retail analogue, the BOC must offer access “sufficient to allow an efficient competitor a meaningful opportunity to compete.”” In assessing whether the quality of access affords an efficient competitor a meaningful opportunity to compete, the Commission will examine, in the first instance, whether specific performance standards exist for those functions.⁷⁸ In particular, the Commission **will** consider whether appropriate standards for measuring OSS performance have been adopted by the relevant state commission or agreed upon by the BOC in an interconnection agreement or during the implementation of such an agreement.” If such performance standards exist, the Commission will evaluate whether the BOC’s performance is sufficient to allow an efficient competitor a meaningful opportunity to compete.”

29. The Commission analyzes whether a BOC has met the nondiscrimination standard for each OSS function using a two-step approach. First, the Commission determines “whether

⁷³ *Id.* at 3991, para. 85

⁷⁴ *Id.*

⁷⁵ *Id.* For example, the Commission would not deem an incumbent LEC to be providing nondiscriminatory access to OSS if limitations on the processing of information between the interface and the back office systems prevented a competitor from performing a specific function in substantially the same time and manner as the incumbent performs that function for itself.

⁷⁶ *See id.*

⁷⁷ *Id.* at 3991, para. 86.

⁷⁸ *Id.*

⁷⁹ *Id.* As a general proposition, specific performance standards adopted by a state commission in an arbitration decision would be more persuasive evidence of commercial reasonableness than a standard unilaterally adopted by the BOC outside of its interconnection agreement. *Id.* at 20619-20.

⁸⁰ *See id.* at 3991-92, para. 86

the BOC has deployed the necessary systems and personnel to provide sufficient access to each of the necessary OSS functions and whether the BOC is adequately assisting competing carriers to understand how to implement and use all of the OSS functions available to them." The Commission next assesses "whether the OSS functions that the BOC has deployed are operationally ready, as a practical matter."⁸²

30. Under the first inquiry, a BOC must demonstrate that it has developed sufficient electronic (for functions that the BOC accesses electronically) and manual interfaces to allow competing carriers equivalent access to all of the necessary OSS functions." For example, a BOC must provide competing carriers with the specifications necessary for carriers to design or modify their systems in a manner that will enable them to communicate with the BOC's systems and any relevant interfaces.⁸⁴ In addition, a BOC must disclose to competing carriers any internal business rules⁸⁵ and other formatting information necessary to ensure that a carrier's requests and orders are processed efficiently.⁸⁶ Finally, a BOC must demonstrate that its OSS is designed to

⁸¹ *Id.* at 3992, para. 87; ***Ameritech Michigan Order***, 12 FCC Rcd at 20616; *see also Second BellSouth Louisiana Order*, 13 FCC Rcd at 20654; ***BellSouth South Carolina Order***, 13 FCC Rcd at 592-93. In making this determination, the Commission "consider[s] all of the automated and manual processes a BOC has undertaken to provide access to OSS functions," including the interface (or gateway) that connects the competing carrier's own operations support systems to the BOC; any electronic or manual processing link between that interface and the BOC's OSS (including all necessary back office systems and personnel); and all of the OSS that a BOC uses in providing network elements and resale services to a competing carrier. ***Ameritech Michigan Order***, 12 FCC Rcd at 20615; *see also Second BellSouth Louisiana Order*, 13 FCC Rcd at 20654 n.241.

⁸² *See Bell Atlantic New York Order*, 15 FCC Rcd at 3992, para. 88.

⁸³ *Id.* at 3992, para. 87; *see also Ameritech Michigan Order*, 12 FCC Rcd at 20616, para. 136 (The Commission determines "whether the BOC has deployed the necessary systems and personnel to provide sufficient access to each of the necessary OSS functions and whether the BOC is adequately assisting competing carriers to understand how to implement and use **all** of the OSS functions available to them,"). For example, a BOC must provide competing carriers the specifications necessary to design their systems interfaces and business rules necessary to format orders, and demonstrate that systems are scalable to handle current and projected demand. *Id.*

⁸⁴ *Id.*

⁸⁵ Business rules refer to the protocols that a BOC uses to ensure uniformity in the format of orders and include information concerning ordering codes such as universal service ordering codes (USOCs) and field identifiers (FIDs). *Id.*; *see also Ameritech Michigan Order*, 12 FCC Rcd at 20617 n.335.

⁸⁶ *Bell Atlantic New York Order*, 15 FCC Rcd at 3992, para. 88

accommodate both current demand and projected demand for competing carriers' access to OSS functions." Although not a prerequisite, the Commission continues to encourage the use of industry standards as an appropriate means of meeting the needs of a competitive local exchange market.⁸⁸

31. Under the second inquiry, the Commission examines performance measurements and other evidence of commercial readiness to ascertain whether the BOC's OSS is handling current demand and will be able to handle reasonably foreseeable future volumes.⁸⁹ The most probative evidence that OSS functions are operationally ready is actual commercial usage.⁹⁰ Absent sufficient and reliable data on commercial usage, the Commission will consider the results of carrier-to-carrier testing, independent third-party testing, and internal testing in assessing the commercial readiness of a BOC's OSS.⁹¹ Although the Commission does not require OSS testing, a persuasive test will provide us with an objective means by which to evaluate a BOC's OSS readiness where there is little to no evidence of commercial usage, **or** may otherwise strengthen an application where the BOC's evidence of actual commercial usage is weak or is otherwise challenged by competitors. The persuasiveness of a third-party review, however, is dependent upon the qualifications, experience and independence of the third party and the conditions and scope of the review **itself**.⁹² If the review is limited in scope **or** depth or is not independent and blind, the Commission will give it minimal weight. **As** noted above, to the extent the Commission reviews performance data, it looks at the totality of the circumstances and generally does not view individual performance disparities, particularly if they are isolated and slight, as dispositive of whether a BOC has satisfied its checklist obligations." Individual performance disparities may, nevertheless, result in a finding of checklist noncompliance, particularly if the disparity is substantial or has endured for a long time, or if it is accompanied by other evidence of discriminatory conduct or evidence that competing carriers have been denied a meaningful opportunity to compete.

⁸⁷ *Id.*

⁸⁸ *See id.*

⁸⁹ *Id.*, at 3993, para. 89.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *See id.*; *Ameritech Michigan Order*, 12 FCC Rcd at 20659 (emphasizing that a third-party review should encompass the entire obligation of the incumbent **LEC to provide** nondiscriminatory access, and, where applicable, should consider the ability of actual competing carriers in the market to operate using the incumbent's OSS access).

⁹³ *See SWBT Kansas/Oklahoma Order*, 16 FCC Rcd at 6301-02, para. 138.

a. **Relevance of a BOC's Prior Section 271 Orders**

32. The *SWBT Kansas/Oklahoma Order* specifically outlined a non-exhaustive evidentiary showing that must be made in the initial application when a BOC seeks to rely on evidence presented in another application.” First, a BOC’s application must explain the extent to which the OSS are “the same” – that is, whether it employs the shared use of a single OSS, or the use of systems that are identical, but separate.” To satisfy this inquiry, the Commission *looks* to whether the relevant states utilize a common set of processes, business rules, interfaces, systems and, in many instances, even personnel.⁹⁶ The Commission will also carefully examine third party reports that demonstrate that the BOC’s OSS are the same in each of the relevant states.⁹⁷ Finally, where a BOC has discernibly separate OSS, it must demonstrate that its OSS reasonably can be expected to behave in the same manner.⁹⁸ Second, unless an applicant seeks to establish only that certain discrete components of its OSS are the same, an applicant must submit evidence relating to *all* aspects of its OSS, including those OSS functions performed by BOC personnel.

b. **Pre-Ordering**

33. A BOC must demonstrate that: (i) it offers nondiscriminatory access to OSS pre-ordering functions associated with determining whether a loop is capable of supporting xDSL advanced technologies; (ii) competing carriers successfully have built and are using application-to-application interfaces to perform pre-ordering functions and are able to integrate pre-ordering and ordering interfaces;⁹⁹ and (iii) its pre-ordering systems provide reasonably prompt response times and are consistently available in a manner that affords competitors a meaningful opportunity to compete.¹⁰⁰

⁹⁴ See *id.* at 6286-91, paras. 107-18

⁹⁵ See *id.* at 6288, para. 111.

⁹⁶ The Commission has consistently held that a BOC’s OSS includes both mechanized systems and manual processes, and thus the OSS functions performed by BOC personnel have been part of the FCC’s OSS functionality and commercial readiness reviews.

⁹⁷ See *SWBT Kansas/Oklahoma Order, id.* at 6287, para. 108.

⁹⁸ See *id.* at 6288, para. 111

⁹⁹ In prior orders, the Commission has emphasized that providing pre-ordering functionality through an application-to-application interface is essential in enabling carriers to conduct real-time processing **and** to integrate pre-ordering and ordering functions in *the same manner* as the BOC. *SWET Texas Order*, 15 FCC Rcd at 18426, para. 148.

¹⁰⁰ The Commission has held previously that an interface that provides responses in a prompt timeframe and is stable and reliable, is necessary for competing carriers to market their services and serve their customers as efficiently and at the same level of quality as a BOC serves its own (continued.. ..)

34. The pre-ordering phase of OSS generally includes those activities that a carrier undertakes to gather and verify the information necessary to place an order.¹⁰¹ Given that pre-ordering represents the first exposure that a prospective customer has to a competing carrier, it is critical that a competing carrier is able to accomplish pre-ordering activities in a manner no less efficient and responsive than the incumbent.” Most of the pre-ordering activities that must be undertaken by a competing carrier to order resale services and UNEs from the incumbent are analogous to the activities a BOC must accomplish to furnish service to its own customers. For these pre-ordering functions, a BOC must demonstrate that it provides requesting carriers access that enables them to perform pre-ordering functions in substantially the same time and manner as its retail operations.” For those pre-ordering functions that lack a retail analogue, a BOC must provide access that affords an efficient competitor a meaningful opportunity to compete.¹⁰⁴ In prior orders, the Commission has emphasized that providing pre-ordering functionality through an application-to-application interface is essential in enabling carriers to conduct real-time processing and to integrate pre-ordering and ordering functions in the same manner as the BOC.¹⁰⁵

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customers. *See Bell Atlantic New York Order*, 15 FCC Rcd at 4025 and 4029, paras. 145 and 154.

¹⁰¹ *See Bell Atlantic New York Order*, 15 FCC Rcd at 4014, para. 129; *see also Second BellSouth Louisiana Order*, 13 FCC Rcd at 20660, para. 94 (referring to “pre-ordering and ordering” collectively as “the exchange of information between telecommunications carriers about current or proposed customer products and services or unbundled network elements or some combination thereof”). In prior orders, the Commission has identified the following five pre-order functions: (1) customer service record (CSR) information; (2) address validation; (3) telephone number information; (4) due date information; (5) services and feature information. *See Bell Atlantic New York Order*, 15 FCC Rcd at 4015, para. 132; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20660, para. 94; *BellSouth South Carolina Order*, 13 FCC Rcd at 619, para. 147.

¹⁰² *Bell Atlantic New York Order*, 15 FCC Rcd at 4014, para. 129.

¹⁰³ *Id.*; *see also BellSouth South Carolina Order*, 13 FCC Rcd at 623-29 (concluding that failure to deploy an application-to-application interface denies competing carriers equivalent access to pre-ordering OSS functions).

¹⁰⁴ *Bell Atlantic New York Order*, 15 FCC Rcd at 4014, para. 129.

¹⁰⁵ *See id.* at 4014, para. 130; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20661-67, para. 105.

(i) Access to Loop Qualification Information

35. In accordance with the *UNE Remand Order*,¹⁰⁶ the Commission requires incumbent carriers to provide competitors with access to all of the *same* detailed information about the loop that is available to the incumbents,¹⁰⁷ and in the same time frame, so that a competing carrier can make an independent judgment at the pre-ordering stage about whether an end user loop is capable of supporting the advanced services equipment the competing carrier intends to install.¹⁰⁸ Under the *UNE Remand Order*, the relevant inquiry is not whether a BOC's retail arm accesses such underlying information but whether such information exists anywhere in a BOC's back office and can be accessed by any of a BOC's personnel.¹⁰⁹ Moreover, a BOC may not "filter or digest" the underlying information and may not provide only information that is useful in provisioning of a particular type of xDSL that a BOC offers.¹¹⁰ A BOC must also provide loop qualification information based, for example, on an individual address or zip code of the end users in a particular wire center, NXX code or on any other basis that the BOC provides such information to itself. Moreover, a BOC must also provide access for competing carriers to the loop qualifying information that the BOC can itself access manually or electronically. Finally, a BOC must provide access to loop qualification information to competitors within the same time intervals it is provided to the BOC's retail operations or its

¹⁰⁶ *UNE Remand Order*, 15 FCC Rcd at 3885, para. 426 (determining "that the pre-ordering function includes access to loop qualification information").

¹⁰⁷ *See id.* At a minimum, a BOC must provide (1) the composition of the loop material, including both fiber and copper; (2) the existence, location and type of any electronic or other equipment on the loop, including but not limited to, digital loop carrier or other remote concentration devices, feeder/distribution interfaces, bridge taps, load coils, pair-gain devices, disturbers in the same or adjacent binder groups; (3) the loop length, including the length and location of each type of transmission media; (4) the wire gauge(s) of the loop; and (5) the electrical parameters of the loop, which may determine the suitability of the loop for various technologies. *Id.*

¹⁰⁸ As the Commission has explained in prior proceedings, because characteristics of a loop, such as its length and the presence of various impediments to digital transmission, can hinder certain advanced services technologies, carriers often seek to "pre-qualify" a loop by accessing basic loop makeup information that will assist carriers in ascertaining whether the loop, either with or without the removal of the impediments, can support a particular advanced service. *See id.*, 15 FCC Rcd at 4021, para. 140.

¹⁰⁹ *UNE Remand Order*, 15 FCC Rcd at 3885-3887, paras. 427-431 (noting that "to the extent such information is not normally provided to the incumbent's retail personnel, but can be obtained by contacting back office personnel, it must be provided to requesting carriers within the same time frame that any incumbent personnel are able to obtain such information.").

¹¹⁰ *See SWBT Kansas Oklahoma Order*, 16 FCC Rcd at 6292-93, para. 121.

advanced services affiliate.” As the Commission determined in the *UNE Remand Order*, however, “to the extent such information is not normally provided to the incumbent’s retail personnel, but can be obtained by contacting back office personnel, it must be provided to requesting carriers within the same time frame that any incumbent personnel are able to obtain such information.”¹¹²

c. Ordering

36. Consistent with section 271(c)(2)(B)(ii), a ROC must demonstrate its ability to provide competing carriers with access to the OSS functions necessary for placing wholesale orders. For those functions of the ordering systems for which there is a retail analogue, a BOC must demonstrate, with performance data and other evidence, that it provides competing carriers with access to its OSS in substantially the same time and manner as it provides to its retail operations. For those ordering functions that lack a direct retail analogue, a BOC must demonstrate that its systems and performance allow an efficient carrier a meaningful opportunity to compete. As in prior section 271 orders, the Commission **looks** primarily at the applicant’s ability to return order confirmation notices, order reject notices, order completion notices and jeopardies, and at its order flow-through rate.”

d. Provisioning

37. A BOC must provision competing carriers’ orders for resale and UNE-P services in substantially the same time and manner as it provisions orders for its own retail customers.” Consistent with the approach in prior section 271 orders, the Commission examines a BOC’s provisioning processes, as well as its performance with respect to provisioning timeliness (i.e., missed due dates and average installation intervals) and provisioning quality (i.e., service problems experienced at the provisioning stage).”*

¹¹¹ *Id*

¹¹² *UNE Remand Order*, 15 FCC Rcd at 3885-3887, paras. 427-31

¹¹³ See *SWBT Texas Order*, 15 FCC Rcd at 18438, para. 170; *Bell Atlantic New York Order*, 15 FCC Rcd at 4035-39, paras. 163-66. The Commission examines (i) order flow-through rates, (ii) jeopardy notices and (iii) order completion notices using the “same time and manner” standard. The Commission examines order confirmation notices and order rejection notices using the “meaningful opportunity to compete” standard.

¹¹⁴ See *Bell Atlantic New York*, 15 FCC Rcd at 4058, para. 196. For provisioning timeliness, the Commission looks to missed due dates and average installation intervals; for provisioning quality, the Commission **looks** to service problems experienced at the provisioning stage.

¹¹⁵ *Id*

e. Maintenance and Repair

38. A competing carrier that provides service through resale or UNEs remains dependent upon the incumbent LEC for maintenance and repair. Thus, as part of its obligation to provide nondiscriminatory access to OSS functions, a BOC must provide requesting carriers with nondiscriminatory access to its maintenance and repair systems.¹¹⁶ To the extent a BOC performs analogous maintenance and repair functions for its retail operations, it must provide competing carriers access that enables them to perform maintenance and repair functions "in substantially the same time and manner" as a BOC provides its retail customers.¹¹⁷ Equivalent access ensures that competing carriers can assist customers experiencing service disruptions using the same network information and diagnostic tools that are available to BOC personnel.¹¹⁸ Without equivalent access, a competing carrier would be placed at a significant competitive disadvantage, as its customer would perceive a problem with a BOC's network as a problem with the competing carrier's own network.¹¹⁹

f. Billing

39. A BOC must provide nondiscriminatory access to its billing functions, which is necessary to enable competing carriers to provide accurate and timely bills to their customers.¹²⁰ In making this determination, the Commission assesses a BOC's billing processes and systems, and its performance data. Consistent with prior section 271 orders, a BOC must demonstrate that it provides competing carriers with complete and accurate reports on the service usage of competing carriers' customers in substantially the same time and manner that a BOC provides such information to itself, and with wholesale bills in a manner that gives competing carriers a meaningful opportunity to compete.¹²¹

g. Change Management Process

40. Competing carriers need information about, and specifications for, an incumbent's systems and interfaces to develop and modify their systems and procedures to access the

¹¹⁶ *Id.* at 4067, para. 212; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20692; *Ameriitech Michigan Order*, 12 FCC Rcd at 20613, 20660-61.

¹¹⁷ *Bell Atlantic New York Order*, 15 FCC Rcd at 4058, para. 196; *see also Second BellSouth Louisiana Order*, 13 FCC Rcd at 20692-93.

¹¹⁸ *Bell Atlantic New York Order*, 15 FCC Rcd at **4058**, para. 196.

¹¹⁹ *Id.*

¹²⁰ *See SWBT Texas Order*, 15 FCC Rcd at 18461, para. 210.

¹²¹ *See id.*; *SWBT Kansas/Oklahoma Order*, 16 FCC Rcd at 6316-17, at para. **163**.

incumbent's OSS functions.'" Thus, in order to demonstrate that it is providing nondiscriminatory access to its OSS, a BOC must first demonstrate that it "has deployed the necessary systems and personnel to provide sufficient access to each of the necessary OSS functions and . . . is adequately assisting competing carriers to understand how to implement and use all of the OSS functions available to them."¹²³ By showing that it adequately assists competing carriers to use available OSS functions, a BOC provides evidence that it offers an efficient competitor a meaningful opportunity to compete."¹²⁴ As part of this demonstration, the Commission will give substantial consideration to the existence of an adequate change management process and evidence that the BOC has adhered to this process over time."

41. The change management process refers to the methods and procedures that the BOC employs to communicate with competing carriers regarding the performance of, and changes in, the BOC's OSS.¹²⁶ Such changes may include updates to existing functions that impact competing carrier interface(s) upon a BOC's release of new interface software; technology changes that require competing carriers to meet new technical requirements upon a BOC's software release date; additional functionality changes that may be used at the competing carrier's option, on or after a BOC's release date for new interface software; and changes that may be mandated by regulatory authorities."¹²⁷ Without a change management process in place, a BOC can impose substantial costs on competing carriers simply by making changes to its systems and interfaces without providing adequate testing opportunities and accurate and timely notice and documentation of the changes.¹²⁸ Change management problems can impair a competing carrier's ability to obtain nondiscriminatory access to UNEs, and hence a BOC's compliance with section 271(2)(B)(ii).¹²⁹

42. In evaluating whether a BOC's change management plan affords an efficient competitor a meaningful opportunity to compete, the Commission first assesses whether the plan

¹²² *Bell Atlantic New York Order*, 15 FCC Rcd at 3999-4000, para. 102; *First BellSouth Louisiana Order*, 13 FCC Rcd at 6279 n. 197; *BellSouth South Carolina Order*, 13 FCC Rcd at 625 n.467; *Ameritech Michigan Order*, 12 FCC Rcd at 20617 n.334; *Local Compersilion Second Report and Order*, 11 FCC Rcd at 19742.

¹²³ *Bell Atlantic New York Order*, 15 FCC Rcd at 3999, para. 102.

¹²⁴ *Id.* at 3999-4000, para. 102

¹²⁵ *Id.* at 4000, para. 102

¹²⁶ *Id.* at 4000, para. 103

¹²⁷ *Id.*

¹²⁸ *Id.* at 4000, para. 103.

¹²⁹ *Id.*

is adequate. In making this determination, it assesses whether the evidence demonstrates: (1) that information relating to the change management process is clearly organized and readily accessible to competing carriers;” (2) that competing carriers had substantial input in the design and continued operation of the change management process;” (3) that the change management plan defines a procedure for the timely resolution of change management disputes;” (4) the availability of a stable testing environment that mirrors production;¹³³ and (5) the efficacy of the documentation the BOC makes available for the purpose of building an electronic gateway.¹³⁴ After determining whether the BOC’s change management plan is adequate, the Commission evaluates whether the BOC has demonstrated a pattern of compliance with this plan.”

2. UNE Combinations

43. In order to comply with the requirements of checklist item 2, a BOC must show that it is offering “[n]ondiscriminatory access to network elements in accordance with the requirements of section 251(c)(3).”¹³⁵ Section 251(c)(3) requires an incumbent LEC to “provide, to any requesting telecommunications carrier . . . nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms and conditions that are just, reasonable, and nondiscriminatory.””” Section 251(c)(3) of the Act also requires incumbent LECs to provide UNEs in a manner that allows requesting carriers to combine such elements in order to provide a telecommunications service.”

44. In the *Ameritech Michigan Order*, the Commission emphasized that the ability of requesting carriers to use UNEs, as well as combinations of UNEs, is integral to achieving

¹³⁰ *Id.* at 4002, para. 107.

¹³¹ *Id.* at 4000, para. 104.

¹³² *Id.* at 4002, para. 108.

¹³³ *Id.* at 4002-03, paras. 109-10.

¹³⁴ *Id.* at 4003-04, para. 110. In the *Bell Atlantic New York Order*, the Commission used these factors in determining whether Bell Atlantic had an adequate change management process in place. See *id.* at 4004, para. 111. The Commission left open the possibility, however, that a change management plan different from the one implemented by Bell Atlantic may be sufficient to demonstrate compliance with the requirements of section 271. *Id.*

¹³⁵ *Id.* at 3999, para. 101, 4004-05, para. 112.

¹³⁶ 47 U.S.C. § 271(c)(2)(B)(ii).

¹³⁷ *Id.* § 251(c)(3).

¹³⁸ *Id.*

Congress' objective of promoting competition in local telecommunications markets.” Using combinations of UNEs provides a competitor with the incentive and ability to package and market services in ways that differ from the BOCs' existing service offerings in order to compete in the local telecommunications market.¹⁴⁰ Moreover, combining the incumbent's UNEs with their own facilities encourages facilities-based competition and allows competing providers to provide a wide array of competitive choices.” Because the use of combinations of UNEs **is** an important strategy for entry into the local telecommunications market, as well **as** an obligation under the requirements of section 271, the Commission examines section 271 applications to determine whether competitive carriers **are** able to combine network elements as required by the Act and the Commission's regulations.¹⁴²

3. Pricing of Network Elements

45. Checklist item 2 of section 271 states that a BOC must provide “nondiscriminatory access to network elements in accordance with sections 251(c)(3) and 252(d)(1)” of the Act.¹⁴³ Section 251(c)(3) requires incumbent LECs to provide “nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory.”¹⁴⁴ Section 252(d)(1) requires that a state commission's determination of the just and reasonable rates for network elements shall be based on the cost of providing the network elements, shall be

¹³⁹ *Ameritech Michigan Order*, 12 FCC Rcd at 20718-19; *BellSouth South Carolina Order*, 13 FCC Rcd at 646.

¹⁴⁰ *BellSouth South Carolina Order*, 13 FCC Rcd at 646; *see also Local Competition First Report and Order*, 11 FCC Rcd at 15666-68.

¹⁴¹ *Bell Atlantic New York Order*, 15 FCC Rcd at 4077-78, para. 230.

¹⁴² *Id.* In *Iowa Utilities Board v. FCC*, 219 F.3d 744 (8th Cir. 2000), the Eighth Circuit had vacated the Commission's “additional combinations” rules (47 C.F.R. Sections 51.315(c)-(f)). However, on May 13, 2002, the Supreme Court reversed the Eighth Circuit with respect to those rules and remanded the case to the court of appeals “for further proceedings consistent with this opinion.” *Verizon Communications Inc. v. FCC*, 122 S.Ct. 1646, 1687. *See also id.* at 1683-87. In response, the Eighth Circuit, on August 21, 2002, vacated its prior opinion insofar as it had vacated the pertinent combinations rules and denied the petitions for review with respect to those rules. *Iowa Utilities Board v. FCC*, 8th Circuit Nos. 96-3321, *et al.*, Judgment, filed August 21, 2002.). *See also Competitive Telecommunications Association v. FCC*, 309 F.3d 8 (2002) (affirming the Commission's interim decision to limit the ability of competitive local exchange carriers to gain access to a network element combination known as the enhanced extended link).

¹⁴³ 47 U.S.C. § 271(c)(2)(B)(ii)

¹⁴⁴ *Id.* § 251(c)(3)

nondiscriminatory, and may include a reasonable profit.” Pursuant to this statutory mandate, *the* Commission has determined that prices for UNEs must be based on the total element long run incremental cost (TELRIC) of providing those elements.” The Commission also promulgated **rule** 51.315(b), which prohibits incumbent LECs from separating already combined elements before providing them to competing carriers, except on request.¹⁴⁷ The Commission has previously held that it will not conduct a *de novo* review of a state’s pricing determinations and will reject **an** application only if “basic TELRIC principles are violated or the state commission makes clear errors in factual findings on matters so substantial that the end result falls outside the range that the reasonable application of TELRIC principles would produce.”¹⁴⁸

46. Although the **U.S.** Court of Appeals for the Eighth Circuit stayed the Commission’s pricing rules in 1996,¹⁴⁹ the Supreme Court restored the Commission’s pricing authority on January 25, 1999, and remanded to the Eighth Circuit for consideration of the merits of the challenged rules.¹⁵⁰ On remand from the Supreme Court, the Eighth Circuit concluded that while TELRIC is an acceptable method for determining costs, certain specific requirements

¹⁴⁵ 47 U.S.C. § 252(d)(1)

¹⁴⁶ *Local Competition First Report and Order*, 11 FCC Rcd at 15844-46, paras. 674-79; 47 C.F.R. §§ 51.501 *et seq.*; *see also* *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, and *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order and Fourth Report and Order, 14 FCC Rcd 20912, 20974, para. 135 (*Line Sharing Order*) (concluding that states should set the prices for line sharing as a new network element in the same manner as the state sets prices for other UNEs).

¹⁴⁷ See 47 C.F.R. § 51.315(b).

¹⁴⁸ *Bell Atlantic New York Order*, 15 FCC Rcd at 4084, para. 244; *SWBT Kansas/Oklahoma Order*, 16 FCC Rcd at 6266, para. 59.

¹⁴⁹ *Iowa Utils. Bd. v. FCC*, 120 F.3d 753, 800, 804, 805-06 (8th Cir. 1997).

¹⁵⁰ *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999). In reaching its decision, the Court acknowledged that section 201(b) “explicitly grants the FCC jurisdiction to make rules governing matters to which the 1996 Act applies.” *Id.* at 380. Furthermore, the Court determined that section 251(d) also provides evidence of an express jurisdictional grant by requiring that “the Commission [shall] complete all actions necessary to establish regulations to implement the requirements of this section.” *Id.* at 382. The Court also held that the pricing provisions implemented under the Commission’s rulemaking authority do not inhibit the establishment of rates by the states. The Court concluded that the Commission has jurisdiction to design a pricing methodology to facilitate local competition under the 1996 Act, including pricing for interconnection and unbundled access, as “it is the States that will apply those standards and implement that methodology, determining the concrete result.” *Id.*

contained within the Commission's pricing rules were contrary to Congressional intent.¹⁵¹ The Eighth Circuit stayed the issuance of its mandate pending review by the Supreme Court.” The Supreme Court, on May 13, 2002, upheld the Commission's forward-looking pricing methodology in determining costs of UNEs and “reverse[d] the Eighth Circuit's judgment insofar as it invalidated TELRIC as a method for setting rates under the Act.”” Accordingly, the Commission's pricing rules remain in effect.

C. Checklist Item 3 – Poles, Ducts, Conduits and **Rights of Way**

47. Section 271(c)(2)(B)(iii) requires BOCs to provide “[n]ondiscriminatory access to the poles, ducts, conduits, and rights-of-way owned or controlled by the [BOC] at just and reasonable rates in accordance with the requirements of section 224.”¹⁵⁴ Section 224(f)(1) states that “[a] utility shall provide a cable television system or any telecommunications carrier with nondiscriminatory access to any pole, duct, conduit, or right-of-way owned or controlled by it.”” Notwithstanding this requirement, section 224(f)(2) permits a utility providing electric service to deny access to its poles, ducts, conduits, and rights-of-way, on a nondiscriminatory basis, “where there is insufficient capacity and for reasons of safety, reliability and generally applicable engineering purposes.”¹⁵⁶ Section 224 also contains two separate provisions governing the

¹⁵¹ *Iowa Utils. Bd. v. FCC*, 219 F.3d 744 (8th Cir. 2000), *petition for cert. granted sub nom Verizon Communications v. FCC*, 121 S. Ct. 877 (2001).

¹⁵² *Iowa Utils. Bd. v. FCC*, No. 96-3321 *et al.* (8th Cir. Sept. 25, 2000).

¹⁵³ *Verizon v. FCC*, 122 S.Ct. at 1679. On August 21, 2002, the Eighth Circuit implemented the Supreme Court's mandate with respect to the Commission's TELRIC pricing rule by vacating its prior opinion insofar as it had invalidated that rule and by denying the petitions for review of that rule. *Iowa Utilities Board v. FCC*, 8th Circuit Nos. 96-3321, *et al.*, Judgment, filed August 21, 2002.

¹⁵⁴ 47 U.S.C. § 271(c)(2)(B)(iii). **As** originally enacted, section 224 was intended to address obstacles that cable operators encountered in obtaining access to poles, ducts, conduits, or rights-of-way owned or controlled by utilities. The 1996 Act amended section 224 in several important respects to ensure that telecommunications carriers as well as cable operators have access to poles, ducts, conduits, or rights-of-way owned or controlled by utility companies, including LECs. *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20706, n.574.

¹⁵⁵ 47 U.S.C. § 224(f)(1). Section 224(a)(1) defines “utility” to include any entity, including a LEC, that controls “poles, ducts, conduits, or rights-of-way used, in whole **or** in part, for any wire communications.” 47 U.S.C. § 224(a)(1).

¹⁵⁶ 47 U.S.C. § 224(f)(2). In the *Local Competition First Report and Order*, the Commission concluded that, although the statutory exception enunciated in section 224(f)(2) appears to be limited to utilities providing electrical service, LECs should also be permitted to deny access to their poles, ducts, conduits, and rights-of-way because of insufficient capacity and for reasons of safety, reliability and generally applicable engineering purposes, provided the assessment of such

(continued ...)

maximum rates that a utility may charge for “pole attachments.”¹⁵⁷ Section 224(b)(1) states that the Commission shall regulate the rates, terms, and conditions governing pole attachments to ensure that they are ‘just and reasonable.’¹⁵⁸ Notwithstanding this general grant of authority, section 224(c)(1) states that “[n]othing in [section 224] shall be construed to apply to, or to give the Commission jurisdiction with respect to the rates, terms, and conditions, or access to poles, ducts, conduits and rights-of-way as provided in [section 224(f)], for pole attachments in any case where such matters are regulated by a State.”¹⁵⁹ As of 1992, nineteen states, including Connecticut, had certified to the Commission that they regulated the rates, terms, and conditions for pole attachments.¹⁶⁰

D. Checklist Item 4 – Unbundled Local Loops

48. Section 271(c)(2)(B)(iv) of the Act, item 4 of the competitive checklist, requires that a BOC provide “[l]ocal loop transmission from the central office to the customer’s premises, unbundled from local switching or other services.”¹⁶¹ The Commission has defined the loop as a transmission facility between a distribution frame, or its equivalent, in an incumbent LEC central office, and the demarcation point at the customer premises. This definition includes different types of loops, including two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide service such as ISDN, ADSL, HDSL, and DSI-level signals.¹⁶²

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factors is done in a nondiscriminatory manner. *Local Competition First Report and Order*, 11 FCC Rcd at 16080-81, paras. 1175-77.

¹⁵⁷ Section 224(a)(4) defines “pole attachment” as “any attachment by a cable television system or provider of telecommunications service to a pole, duct, conduit, or right-of-way owned or controlled by a utility.” 47 U.S.C. § 224(a)(4).

¹⁵⁸ 47 U.S.C. § 224(b)(1).

¹⁵⁹ *Id.* § 224(c)(1). The 1996 Act extended the Commission’s authority to include not just rates, terms, and conditions, but also the authority to regulate nondiscriminatory access to poles, ducts, conduits, and rights-of-way. *Local Competition First Report and Order*, 11 FCC Rcd at 16104, para. 1232; 47 U.S.C. § 224(f). Absent state regulation of terms and conditions of nondiscriminatory attachment access, the Commission retains jurisdiction. *Local Competition First Report and Order*, 11 FCC Rcd at 16104, para. 1232; 47 U.S.C. § 224(c)(1); see also *Bell Atlantic New York Order*, 15 FCC Rcd at 4093, para. 264.

¹⁶⁰ See *States That Have Certified That They Regulate Pole Attachments*, Public Notice, 7 FCC Rcd 1498 (1992); 47 U.S.C. § 224(f).

¹⁶¹ 47 U.S.C. § 271(c)(2)(B)(iv)

¹⁶² *Local Competition First Report and Order*, 11 FCC Rcd at 15691, para. 380; *UNERemand Order*, 15 FCC Rcd at 3772-73, paras. 166-67, n.301 (retaining definition of the local loop from (continued...))

49. In order to establish that it is “providing” unbundled local loops in compliance with checklist item 4, a BOC must demonstrate that it has a concrete and specific legal obligation to furnish loops and that it is currently doing so in the quantities that competitors demand and at an acceptable level of quality. A BOC must also demonstrate that it provides nondiscriminatory access to unbundled loops.¹⁶³ Specifically, the BOC must provide access to any functionality of the loop requested by a competing carrier unless it is not technically feasible to condition the loop facility to support the particular functionality requested. In order to provide the requested loop functionality, such as the ability to deliver xDSL services, the BOC may be required to take affirmative steps to condition existing loop facilities to enable competing carriers to provide services not currently provided over the facilities. The BOC must provide competitors with access to unbundled loops regardless of whether the BOC uses digital loop carrier (DLC) technology or similar remote concentration devices for the particular loops sought by the competitor.

50. On December 9, 1999, the Commission released the *Line Sharing Order*, which introduced new rules requiring BOCs to offer requesting carriers unbundled access to the high-frequency portion of local loops (HFPL).¹⁶⁴ HFPL is defined as “the frequency above the voiceband on a copper loop facility that is being used to carry traditional POTS analog circuit-switched voiceband transmissions.” This definition applies whether a BOC’s voice customers are served by copper or by digital loop carrier equipment. Competing carriers should have access to the HFPL at either a central office or at a remote terminal. However, the HFPL network element is *only* available on a copper loop facility.¹⁶⁵

51. To determine whether a BOC makes line sharing available consistent with Commission rules set out in the *Line Sharing Order*, the Commission examines categories of performance measurements identified in the *Bell Atlantic New York* and *SWBT Texas Orders*. Specifically, a successful BOC applicant could provide evidence of BOC-caused missed installation due dates, average installation intervals, trouble reports within 30 days of installation, mean time to repair, trouble report rates, and repeat trouble report rates. In addition, a successful

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the *Local Competition First Report and Order*, but replacing the phrase “network interconnection device” with “demarcation point,” and making explicit that dark fiber and loop conditioning are among the features, functions and capabilities of the loop).

¹⁶³ *SWBT Texas Order*, 15 FCC Rcd at 18481-81, para. 248; *Bell Atlantic New York Order*, 15 FCC Rcd at 4095, para. 269; *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20637, para. 185.

¹⁶⁴ See *Line Sharing Order*, 14 FCC Rcd at 20924-27, paras. 20-27; see also n.63 at C-12 *supra*.

¹⁶⁵ See *Deployment of Wireline Services offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order on Reconsideration in CC Docket No. 98-147, Fourth Report and Order on Reconsideration in CC Docket No. 96-98, 16 FCC Rcd 2101, 2106-07, para. 10 (2001).

BOC applicant should provide evidence that its central offices are operationally ready to handle commercial volumes of line sharing and that it provides competing carriers with nondiscriminatory access to the pre-ordering and ordering OSS functions associated with the provision of line shared loops, including access to loop qualification information and databases.

52. Section 271(c)(2)(B)(iv) also requires that a BOC demonstrate that it makes line splitting available to competing carriers so that competing carriers may provide voice and data service over a single loop.¹⁶⁶ In addition, a BOC must demonstrate that a competing carrier, either alone or in conjunction with another carrier, is able to replace an existing UNE-P configuration used to provide voice service with an arrangement that enables it to provide voice and data service to a customer. To make such a showing, a BOC must show that it has a legal obligation to provide line splitting through rates, terms, and conditions in interconnection agreements and that it offers competing carriers the ability to order an unbundled xDSL-capable loop terminated to a collocated splitter and DSLAM equipment, and combine it with unbundled switching and shared transport.¹⁶⁷

E. Checklist Item 5 – Unbundled Local Transport

53. Section 271(c)(2)(B)(v) of the competitive checklist requires a BOC to provide “[l]ocal transport from the trunk side of a wireline local exchange carrier switch unbundled from switching or other services.”¹⁶⁸ The Commission has required that BOCs provide both dedicated and shared transport to requesting carriers.¹⁶⁹ Dedicated transport consists of BOC transmission facilities dedicated to a particular customer or carrier that provide telecommunications between wire centers owned by BOCs or requesting telecommunications carriers, or between switches owned by BOCs or requesting telecommunications carriers.” Shared transport consists of

¹⁶⁶ See *generally SWBT Texas Order*, 15 FCC Rcd at 18515-17, paras. 323-329 (describing line splitting); 47 C.F.R. § 51.703(c) (requiring that incumbent LECs provide competing carriers with access to unbundled loops in a manner that allows competing carriers “to provide any telecommunications service that can be offered by means of that network element”).

¹⁶⁷ See *SWBT Kansas/Oklahoma Order*, 16 FCC Rcd at 6348, para. 220.

¹⁶⁸ 47 U.S.C. § 271(c)(2)(B)(v).

¹⁶⁹ *Second BellSouth Louisiana Order*, 13 FCC Rcd at 20719, para. 201.

¹⁷⁰ *Id.* A BOC has the following obligations with respect to dedicated transport: (a) provide unbundled access to dedicated transmission facilities between BOC central offices or between such offices and serving wire centers (SWCs); between SWCs and interexchange carriers points of presence (POPs); between tandem switches and SWCs, end offices or tandems of the BOC, and the wire centers of BOCs and requesting carriers; (b) provide all technically feasible transmission capabilities such as DS1, DS3, and Optical Carrier levels that the competing carrier could use to provide telecommunications; (c) not limit the facilities to which dedicated interoffice transport facilities are connected, provided such interconnections are technically (continued....)